

Abstract of the Disclosure

A purge valve is in fluid communication between a fuel vapor collection canister and an intake manifold of an internal combustion engine. The purge valve includes a body, a seat, a head, and a solenoid. The body defines a fuel vapor flow path between a first port is in fluid communication with the fuel vapor collection canister, and a second port is in fluid communication with the intake manifold. The seat defines an aperture through which the fluid flow passes in an open configuration of the purge valve. The head includes a permanent magnet, and is attracted to the seat and occludes the aperture in a closed configuration of the purge valve. The solenoid repels the head toward the open configuration when the solenoid is energized, and the head occludes the aperture due to the magnetic attraction with the seat when the solenoid is de-energized.